

Wolfram|Alpha – The Computational Knowledge Engine

Website: <http://www.wolframalpha.com/>

Description:

Wolfram|Alpha claims that it's a "Knowledge Engine" that goes through its own licensed databases and content entered, rather than search the web and rank results based on algorithms, to find answers to users' questions." But what does that mean?

The beauty lies in its simplicity – unlike *Search* Engines like Google, which generate an assortment of ranked items from the web that relate to your search, Wolfram|Alpha's design is to search through its own database (which at launch back in 2009 contained over 10 trillion individual chunks of data) to find a factually correct answer to the question asked and produce it in visual form. Thus we call it the *Knowledge* Engine.

How to Use the Resource:

Users can go to the Wolfram|Alpha website, type a query into the search box and press Enter. Wolfram|Alpha will then go through its massive servers and find an appropriate answer to the query and produce a visual on screen that the user can understand.

Why This Resource Is Useful:

1. **No Personal Information Required:** The website is free for all to use, and does not require you to create an account (although the Pro version has a lot of extra features at your disposal). No hassle with signing in. No fees. Just answers.
2. **Can Solve Complicated Problems:** Wolfram|Alpha can solve the toughest of problems; problems that students could not easily solve on their own - such as finding the roots for a 9th degree polynomial, or can produce graphs for the most complex of functions.
3. **Can Solve a Multitude of Problems:** If you click on "Examples" just below the search box, you will be directed to the list of topics Wolfram|Alpha has covered – the list contains (but is not limited to) Mathematics, Sciences, Finances, History, Popular Culture, Music, Health, Geography, Shopping, Sports, etc.
4. **Go Pro? Upload Your Own Information/Facts:** By clicking a button below the search bar on the main page you can upload your own information of your choosing. Can't find the answer to a question you may have? Once found, you can upload the question and answer so others can access that information. This does require you to sign-up for a Pro account, though it is still free for the first week.